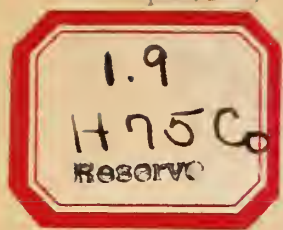


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COOKING WITHOUT ADDED WATER

Cooking without added water, the so-called waterless cooking, is really nothing new, but the application of an old idea to a wider variety of foods. In the beginning, dismiss the idea that such cooking is waterless. Only foods containing water can be so cooked. Furthermore even such foods must have an outside skin or peel, such as that on potatoes or bananas, or they must be cooked slowly in a vessel that can be tightly closed so as to hold in the steam which results from the heating up of the water in the food itself. In meat the same result is accomplished when it is seared and a crust is formed which holds in the juices.

In the general speeding up of American life there has been a demand for quick methods of cooking. Rapid cooking, so far as vegetables are concerned, usually means cooking in water to prevent burning. Unfortunately the tendency has been to drain off the liquid afterward and pour it down the sink. With it are lost not only much of the soluble carbohydrates and mineral salts, but certain of the vitamins, especially those which are soluble in water.

Much has been said about the loss of food value in cooking foods in various ways. As a matter of fact, so far as present knowledge goes, all such losses are due to the solubility of some materials and to the chemical changes which take place in some constituents of food. These chemical changes are affected by the presence of oxygen and by the temperature and length of time of cooking. The loss of vitamin C, except in such acid foods as tomatoes, is especially large. We are just commencing to learn the conditions under which such oxidative changes may be increased and decreased, and at present do not know enough to depend upon regulating the method of cooking so as to conserve this very important vitamin. For that reason, for the time being at least, it is considered safer to incorporate in the diet each day sufficient raw food to insure an abundant supply of vitamin C. At the same time it should be remembered that the less food rich in vitamin C is cooked, the more likely it is to retain its vitamin content. For this reason recipes for short quick cooking in open vessels have been developed.

In cooking without added water, other than baking in the skin, one of two things must be done. Either the heat must be so regulated as to keep it low to prevent burning, or there must be a cooking vessel which conducts heat slowly and distributes it equally so that the food is cooked through without being burned at the bottom. In addition, it is usually necessary to hold in all the steam, since this is an important factor in cooking most vegetables. This was accomplished in the old-fashioned iron Dutch oven with the heavy cover. Also the earthenware or heavy glass casserole does the same thing, especially if it has no steam outlets. Slow cooking in such closed containers has long been recognized as a valuable way for the foods which do not become too strong when all of their volatile constituents as well as the juices are retained.





Newer devices are being put on the market which will accomplish this result. Some of them have been especially constructed so as to distribute the heat equably. Most of these are accompanied by directions which would seem to indicate that the results can be obtained only in these special devices. In most cases similar results may be obtained by the use of equipment already in most kitchens.

In this so-called waterless method of cooking the following points must be kept in mind: That all the juice which cooks out must be retained and served if the full food value of the vegetable is to be enjoyed. Certain vegetables may be too strong if cooked in a covered container. There are volatile flavors which if allowed to escape make a more palatable vegetable of better color, as for example, cabbage, cauliflower, and turnips. This can be accomplished in some cases by leaving the cover slightly ajar and adding water if necessary. Added water does not detract in any way from the food value of the vegetable provided it is either cooked off or served with the vegetable.

Green vegetables, if cooked in tightly closed vessels lose their attractive green color. This is due to the formation of acid in cooking. When cooked in covered containers this acid is left in the product. When cooked in an uncovered vessel this acid is volatilized.

Oven cooking if the heat can be regulated and equally distributed from all sides, accomplishes the same result as the more expensive pieces of equipment.

Certain vegetables are better for short, quick cooking in a larger amount of water with the water concentrated at the end or drained off and used in soups. Some vegetables are especially palatable ground or chopped and cooked for an even shorter time in their own juices with a small quantity of added fat or cream for seasoning. They then retain some of their crispness and their fresh color.

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